

Remarks

The Application has been reviewed in light of the Official Action mailed October 31, 2007. Claims 7, 8, 11, 13, 15-19, 21-23, 25, 26, 28 and 29 have been amended. Claims 30-35 are new. Claims 7, 8 and 10-35 are pending in the Application.

Applicant submits that no new matter has been introduced by these amendments, as these amendments are supported by the specification, claims and drawings as originally filed.

The Examiner rejected claims 7, 8, 13, 15, 26 and 28 under 35 USC §112 as being indefinite. Applicant has amended the claims to address the Examiner's rejections.

The Examiner rejected claims 7, 10-12, 16-20, 23-25, and 29 under 35 U.S.C. §103(a) as being unpatentable over Huettlin (WO00/10699) in view of Pace (US 5,180,358). The Examiner also rejected claims 21 and 22 under 35 U.S.C. §103(a) as being unpatentable over Huettlin in view of Pace and in further view of Huettlin (DE 10104184). The Examiner has indicated that claims 8, 9, 13-15, and 26-28 are allowable if rewritten to overcome the 35 U.S.C. 112 rejections.

Claims 7, 8, and 10-29

Applicant respectfully requests that the Examiner reconsider the rejection of claim 7 because, *inter alia*, Huettlin and Pace fail to disclose: "a first air gap in an upper portion of the wall"; "an air feed device for feeding an air stream through said first air gap into said container"; and that the first air gap or air feed device are "configured such that said air stream introduced through said first air gap has a flow component oriented substantially in an upward direction and, in a region adjoining said air gap, oriented substantially tangentially with respect to at least one of said wall and said deflection element."

The Examiner notes that "Huettlin is silent concerning the use of an air gap connected to an air feed device such that air passes through or transitions through an up-

per portion of the container wall toward the deflection element to introduce air into the container.” (Office Action page 4). The Examiner identifies the gas inlet port 82 or 408 in Pace as satisfying this limitation. However, to the extent that the gas inlet port 82 in Pace could be construed as an air gap with an air feed device, Pace still does not disclose “that said air stream introduced through said first air gap has a flow component oriented substantially in an upward direction and, in a region adjoining said air gap, oriented substantially tangentially with respect to at least one of said wall and said deflection element.” The gas inlet port 82 in Pace is used to introduce a pressurized gas into the container, in order to increase the pressure within the container. (col. 10:5-17). Gas inlet port 82 is connected to outer casing member 44 and introduces pressurized gas into the container through a hole in the outer casing member 44. Fig. 1B shows that the gas inlet port 82 is orthogonal to outer casing member 44 and as a result the flow of pressurized gas emitted from the gas inlet port 82 would be orthogonal as it is introduced into the container. Fig. 1B also shows that the gas inlet port 82 is oriented in a downward direction and as a result flow of pressurized gas from the gas inlet port 82 would be in a downward direction. Thus, Pace does not disclose that either the first air gap or air feed device are “configured such that said air stream introduced through said first air gap has a flow component oriented substantially in an upward direction and, in a region adjoining said air gap, oriented substantially tangentially with respect to at least one of said wall and said deflection element.”

Since the combination of Huettlin and Pace would still lack all of the limitations of claim 7, Applicant respectfully submits that claim 7 is not obvious in view of these references. Further, neither Huettlin nor Pace provide any evidence that one skilled in the art would modify either reference to correspond to claim 7. The present Application discloses that the claimed invention provides, *inter alia*, an air film along the deflection element that enables particles to move along the deflection element. (App. Par. [0016].) This is an improvement that is not recognized or achieved by the prior art. The device in Pace simply uses the gas inlet port 82 to introduce a pressurized gas and to pressur-

ize the container. Pace does not teach nor fairly suggest that gas inlet port 82 is used or could be used to assist the movement of particles along a deflection element in the upper region of the container. In fact, the configuration of the gas inlet port 82 in Fig. 1B of Pace suggests that this port would dispel particles away from the upper region of the container. As a result, Applicant respectfully submits that claim 7 is not obvious in view of Huettlin or Pace.

Claims 30-34

Applicant herein presents new independent claim 30 incorporating the limitations of claim 7 and 9. As a result, Applicant respectfully submits that claim 30 incorporates allowable subject matter identified by the Examiner.

Claim 35

In addition to the reasons stated with respect to claim 7, Applicant respectfully submits that new claim 35 is further not obvious over the combination of Huettlin and Pace because these references do not disclose a first air gap that is “either an interrupted or uninterrupted annular gap that encompasses the vertical axis of rotation.” As discussed above, the Examiner notes that “Huettlin is silent concerning the use of an air gap connected to an air feed device such that air passes through or transitions through an upper portion of the container wall toward the deflection element to introduce air into the container.” (Office Action page 4). The Examiner identifies the gas inlet port 82 or 408 in Pace as satisfying this limitation.

Fig. 1B shows that the gas inlet port 82 introduces pressurized gas into the container through a single hole in the outer casing member 44. As is apparent from Fig. 1B, this hole is not “an interrupted or uninterrupted annular gap that encompasses the vertical axis of rotation” of the container. This hole is only a single point on the outer casing member.

Thus, the combination of Huettlin and Pace would lack all of the limitations of claim 35 and as a result, claim 35 is not obvious in view of these references. Further, neither Huettlin nor Pace provide any evidence that one skilled in the art would modify either reference to incorporate this additional limitation in claim 35. As discussed above, the present Application discloses that the claimed invention provides, *inter alia*, an air film along the deflection element that enables particles to move along the deflection element. (App. Par. [0016].) In the case of claim 35, this is provided along the circumference of the container that encompasses the vertical axis of rotation. The device in Pace, on the other hand, simply uses a single gas inlet port 82 that introduces a pressurized gas at a single point in the container to pressurize the container. Given, the fact that the gas inlet port in Pace is only used to pressurize the container, it is clear that one skilled in the art would not be motivated to modify the gas inlet port in to an “annular gap that encompasses the vertical axis of rotation.” As a result, Applicant respectfully submits that claim 35 is not obvious in view of Huettlin or Pace.

In view of the foregoing remarks, it is respectfully submitted that all of the claims remaining in the Application are in order for allowance, and notice to that effect is respectfully requested.

Respectfully submitted,

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